

ABSTRACT

An eddy current monitoring system may include an elongated core. One or more coils may be coupled with the elongated core for producing an oscillating magnetic field that may couple with one or more conductive regions on a wafer. The core may be translated relative to the wafer to provide improved resolution while maintaining sufficient signal strength. An eddy current monitoring system may include a DC-coupled marginal oscillator for producing an oscillating magnetic field at a resonant frequency, where the resonant frequency may change as a result of changes to one or more conductive regions. Eddy current monitoring systems may be used to enable real-time profile control.

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